Request — Paul Schulaitz

Access DB# 144929

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sabiha Qazi Examiner #: 74141 Date: 2/10/05

Art Unit: 1616 Phone Number ~~30~~ 20622 Serial Number: 10/501,816

Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): ~~PAPER~~ DISK E-MAIL

4C70 Rem 4A45

If more than one search is submitted, please prioritize searches in order of need. MEJ

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Biocidal Compds and their preparatio

Inventors (please provide full names): Jill Patricia Benner et al

Earliest Priority Filing Date: 1/18/02 371 of PCT/GB03/00063 1/16/03

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Cls 1 – 13, 15 + 16

Please search for the compds of formula (I), (II) + (III).

Process for the Production (Cls 9 – 11)

Cl 12

Please see attached Sheet

Thank you

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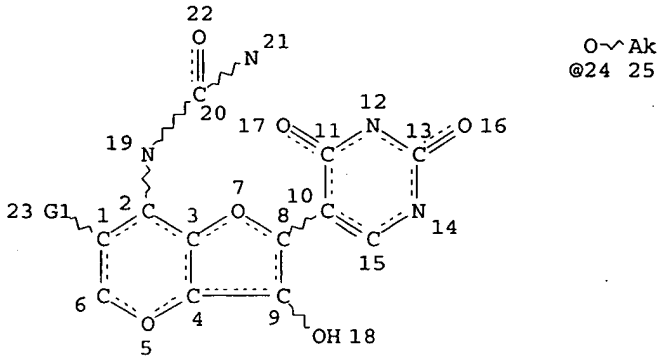
STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher:	NA Sequence (#)		STN	213.02
Searcher Phone #:	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	~~0~~ 1	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic		Dr.Link	
Date Completed: 2/14	Litigation		Lexis/Nexis	
Searcher Prep & Review Time: 10	Fulltext		Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time: 10	Other		Other (specify)	

PTO-1590 (8-01)

=> d que
L1 STR



VAR G1=OH/24
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE
L3 5 SEA FILE=REGISTRY SSS FUL L1
L4 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

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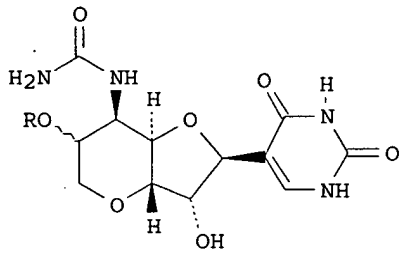
L4 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:675751 HCAPLUS
DOCUMENT NUMBER: 141:190996
TITLE: Process to prepare malayamycin A derivatives as antifungal agents
INVENTOR(S): Hanessian, Stephen; Machaalani, Roger; Marcotte, Stephene Michael Jean
PATENT ASSIGNEE(S): Syngenta Limited, UK
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004069842	A1	20040819	WO 2004-GB359	20040128

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN,

GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: GB 2003-2648 A 20030205
OTHER SOURCE(S): MARPAT 141:190996
GI



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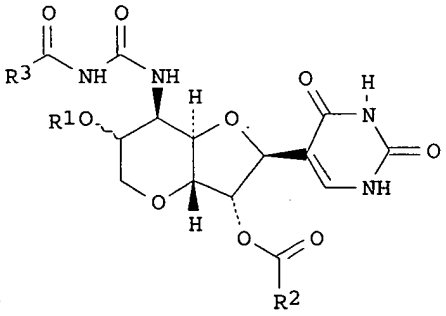


II

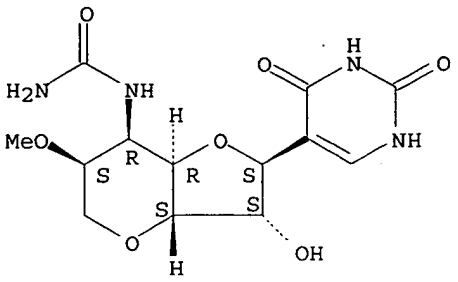
AB A process is provided for the preparation of a compound of the general formula I: wherein R is H or C1-4 alkyl, which comprises treating a compound of the general formula II: where R1 is R or R2CO, R2 is C1-8 alkyl or optionally substituted Ph and R3 is optionally substituted C1-8 alkyl or optionally substituted aryl, with an amine R4NH2 wherein R4 is H or C1-4 alkyl. Also provided are the trans isomers of the compound I where R is CH3 (6-epi-malayamycin A) and H (6-epi-desmethylmalayamycin A), the cis and trans isomers of the compound I where R is C2-4alkyl and various intermediate compds. Thus, malayamycin A (cis-I, R = H) was prepared from D-(+)-ribonolactone via coupling with 2,4-dimethoxy-5-iodopyrimidine and cyclization reactions. The compds. were tested against a variety of foliar fungal diseases of plants. These tests were carried out against Stagonospora nodorum (LEPTNO), Blumeria graminis tritici (ERYSGT), and Puccinia triticina (PUCCRT) on wheat.

IT **569360-94-7P 736993-22-9P**
RL: AGR (Agricultural use); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(process to prepare antifungal malayamycin A derivs. from D-(+)-ribonolactone via coupling with 2,4-dimethoxy-5-iodopyrimidine and cyclization reactions)

RN 569360-94-7 HCAPLUS

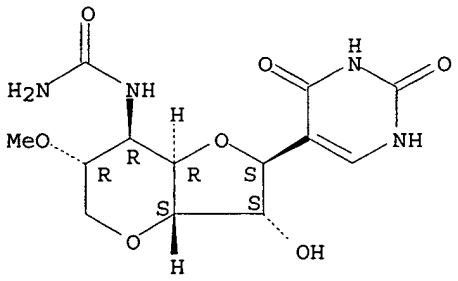
CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 736993-22-9 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-L-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



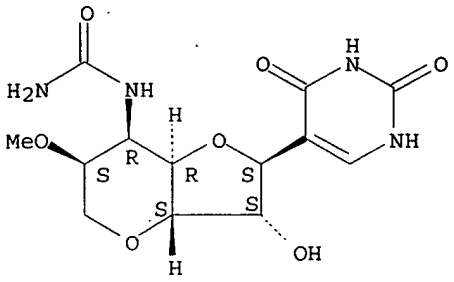
L4 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:805261 HCAPLUS
DOCUMENT NUMBER: 140:28013
TITLE: Total Synthesis and Structural Confirmation of Malayamycin A: A Novel Bicyclic C-Nucleoside from Streptomyces malaysiensis
AUTHOR(S): Hanessian, Stephen; Marcotte, Stephane; Machaalani, Roger; Huang, Guobin
CORPORATE SOURCE: Department of Chemistry, Universite de Montreal, Montreal, QC, H3C 3J7, Can.
SOURCE: Organic Letters (2003), 5(23), 4277-4280
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:28013

AB The stereocontrolled synthesis of malayamycin A, a novel naturally occurring bicyclic C-nucleoside of the perhydrofuropyran type, is described.

IT **569360-94-7P**, Malayamycin A
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereocontrolled synthesis of malayamycin A, a member of naturally occurring bicyclic perhydrofuropyran C-nucleosides from Streptomyces malaysiensis)

RN 569360-94-7 HCAPLUS
CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:591185 HCAPLUS
DOCUMENT NUMBER: 139:132519
TITLE: Antifungal compounds produced by Streptomyces malaysiensis
INVENTOR(S): Benner, Jill Patricia; Boehlendorf, Bettina Gertrud Henriette; Kipps, Martin Richard; Lambert, Nicolas Eugene Paul; Luck, Riet; Molleyres, Louis-pierre; Neff, Snezana; Schuez, Traugott Christoph; Stanley, Paul David
PATENT ASSIGNEE(S): Syngenta Limited, UK; Syngenta Crop Protection, Inc.
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003062242	A1	20030731	WO 2003-GB63	20030110
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1465898	A1	20041013	EP 2003-700849	20030110
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003006944	A	20041214	BR 2003-6944	20030110
PRIORITY APPLN. INFO.:			GB 2002-1160 A	20020118
			WO 2003-GB63 W	20030110

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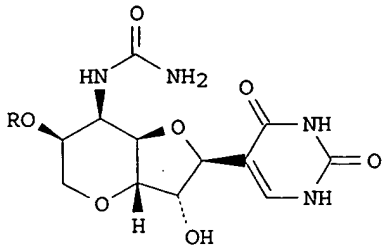


I R=Me
II R=H

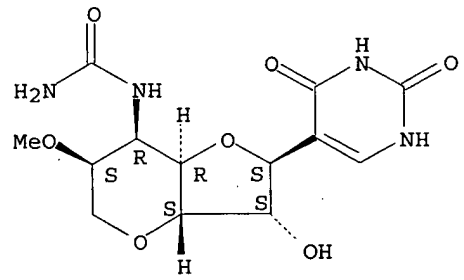
AB The invention provides two compds. that are of particular interest: malayamycin A (I) and desmethylmalayamycin A (II). These compds., which may be prepared by growing under controlled conditions a previously unknown strain of micro-organism from the species Streptomyces malaysiensis, were characterized by NMR and mass spectroscopic data. They have biocidal activity, including anti-fungal, anti-viral and anti-cancer activity, and are of special interest for use in agriculture, horticulture, animal and human health.

IT **569360-94-7P**, Malayamycin A **569360-95-8P**, Desmethylmalayamycin A
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(antifungal compds. produced by Streptomyces malaysiensis)

RN 569360-94-7 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

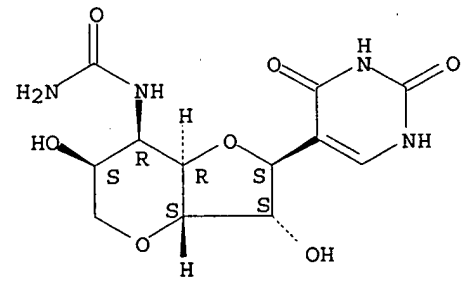
Absolute stereochemistry. Rotation (+).



RN 569360-95-8 HCAPLUS

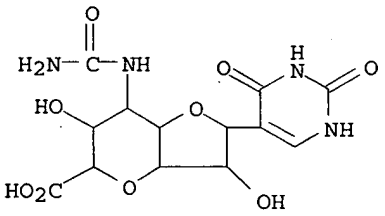
CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

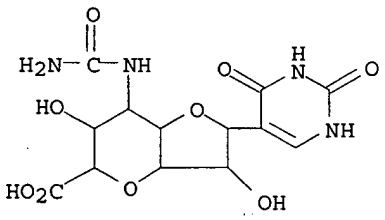


REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1979:23481 HCAPLUS
DOCUMENT NUMBER: 90:23481
TITLE: Studies on ezomycins, antifungal antibiotics. XI. Application of carbon-13 NMR spectroscopy to the structural investigation of ezomycins
AUTHOR(S): Sakata, Kanzo; Uzawa, Jun; Sakurai, Akira
CORPORATE SOURCE: Inst. Phys. Chem. Res., Saitama, Japan
SOURCE: Organic Magnetic Resonance (1977), 10, 230-4
CODEN: ORMRBD; ISSN: 0030-4921
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The structures of ezomycins A1, A2, B1, B2, C1, C2, D1, and D2 were confirmed by studying their natural abundance 13C NMR spectra using gated proton decoupling, long range selective proton decoupling, and selective proton decoupling methods. The J(CH) value of the anomeric C signal supports the β-configuration.
IT **57973-10-1 57973-12-3**
RL: PRP (Properties)
(carbon-13 NMR of)
RN 57973-10-1 HCAPLUS
CN D-threo-β-D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI) (CA INDEX NAME)



RN 57973-12-3 HCAPLUS
CN D-threo-α-D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1977:423659 HCAPLUS
DOCUMENT NUMBER: 87:23659
TITLE: Studies on ezomycins, antifungal antibiotics. Part VIII. Application of carbon-13 NMR spectrometry to the structural investigation of the novel bicyclic anhydrooctose uronic acid nucleosides, constituents of ezomycins
AUTHOR(S): Sakata, Kanzo; Uzawa, Jun

CORPORATE SOURCE: Inst. Phys. Chem. Res., Wako, Japan
SOURCE: Agricultural and Biological Chemistry (1977), 41(2), 413-15
CODEN: ABCHA6; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English
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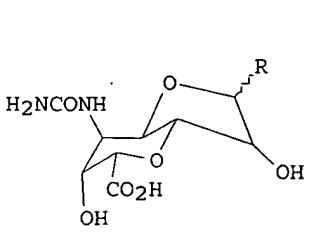

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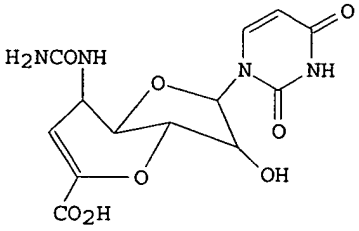
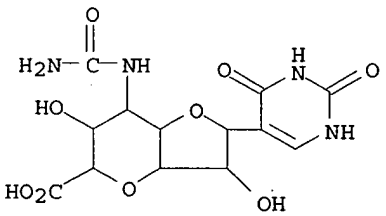


II

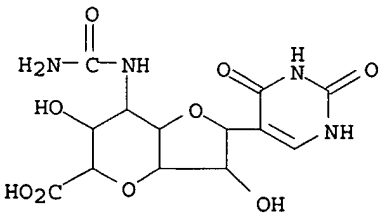
AB The structures of the title nucleosides I (R = β-1-cytosine, β-5-uracil, α-5-uracil) and II, obtained by degradation of ezomycins A1 or A2, B1 or B2, C1 or C2, and A1, resp., were determined by C-13 NMR spectroscopy.

IT **57973-10-1 57973-12-3**
RL: PRP (Properties)
(carbon-13 NMR of, structure in relation to)

RN 57973-10-1 HCAPLUS
CN D-threo-β-D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI) (CA INDEX NAME)

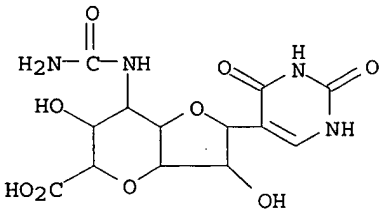


RN 57973-12-3 HCAPLUS
CN D-threo-α-D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1976:4395 HCAPLUS
DOCUMENT NUMBER: 84:4395
TITLE: Ezomycins, antifungal antibiotics. VI. Structures of

ezomycins B1, B2, C1, C2, D1, and D2
AUTHOR(S): Sakata, Kanzo; Sakurai, Akira; Tamura, Saburo
CORPORATE SOURCE: Inst. Phys. Chem. Res., Wako, Japan
SOURCE: Tetrahedron Letters (1975), (37), 3191-4
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The structures of ezomycins B1 (I), B2 (II), C1 (III), C2 (IV), D1 (V), and D2 (VI), isolated from Streptomyces, were determined from chemical degradation
IT **57973-10-1P 57973-12-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 57973-10-1 HCAPLUS
CN D-threo-β-D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI) (CA INDEX NAME)



RN 57973-12-3 HCAPLUS
CN D-threo-α-D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI) (CA INDEX NAME)